

## Abstract of the Disclosure

A low attenuation optical fiber which falls within 2-14 ps/nm/km in absolute value of dispersion over the full wavelength range of 1530-1565nm and no more than 0.25dB/km of transmission loss at 1550nm of wavelength at ordinary temperature and relative humidity, and still remains no more than 0.25dB/km of transmission loss at 1550nm or 1520 nm after its being long enough exposed under ordinary atmospheric pressure consisting substantially of hydrogen; and which further comprises a polarization mode dispersion (PMD) of no more than 0.5ps/√km at a wavelength of 1550nm and a loss increase of no more than 40dB/km in a bending radius of 20mm.